

## lipid IVA 4-amino-4-deoxy-L-arabinosyltransferase

Cat. No. EXWM-2672

Lot. No. (See product label)

### Introduction

**Description** Integral membrane protein present in the inner membrane of certain Gram negative endobacteria. In strains that do not produce 3-deoxy-D-manno-octulosonic acid (Kdo), the enzyme adds a single arabinose unit to the 1-phosphate moiety of the tetra-acylated lipid A precursor, lipid IVA. In the presence of a Kdo disaccharide, the enzyme primarily adds an arabinose unit to the 4-phosphate of lipid A molecules. The *Salmonella typhimurium* enzyme can add arabinose units to both positions.

**Synonyms** undecaprenyl phosphate- $\alpha$ -L-Ara4N transferase; 4-amino-4-deoxy-L-arabinose lipid A transferase; polymyxin resistance protein PmrK; arnT (gene name)

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.2.43

**Reaction** (1) 4-amino-4-deoxy- $\alpha$ -L-arabinopyranosyl diphosphate, octakis-undecaprenyl phosphate +  $\alpha$ -Kdo-(2 $\rightarrow$ 4)- $\alpha$ -Kdo-(2 $\rightarrow$ 6)-lipid A =  $\alpha$ -Kdo-(2 $\rightarrow$ 4)- $\alpha$ -Kdo-(2 $\rightarrow$ 6)-[4-P-L-Ara4N]-lipid A + diphosphate, octakis-undecaprenyl phosphate; (2) 4-amino-4-deoxy- $\alpha$ -L-arabinopyranosyl diphosphate, octakis-undecaprenyl phosphate + lipid IVA = lipid IIA + diphosphate, octakis-undecaprenyl phosphate; (3) 4-amino-4-deoxy- $\alpha$ -L-arabinopyranosyl diphosphate, octakis-undecaprenyl phosphate +  $\alpha$ -Kdo-(2 $\rightarrow$ 4)- $\alpha$ -Kdo-(2 $\rightarrow$ 6)-lipid IVA = 4'- $\alpha$ -L-Ara4N- $\alpha$ -Kdo-(2 $\rightarrow$ 4)- $\alpha$ -Kdo-(2 $\rightarrow$ 6)-lipid IVA + diphosphate, octakis-undecaprenyl phosphate

**Notes** This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

**Storage** Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.